METHOD OF QUALITY OF SERVICE BASED FLOW CONTROL WITIHIN A
DISTRIBUTED SWITCH FABRIC NETWORK

Abstract of the Disclosure

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In a distributed switch fabric network (300) having a first node (302) having a first
node transceiver port (305) and a second node (304) having a second node transceiver port
(340), link level flow control (370) operating between the first node transceiver port and
the second node transceiver port to in response to a congestion condition (321) in the
10   second node transceiver port, wherein the link level flow control suspends transmission of
one of a plurality of priority levels of packets (312) on a channel from the first node
transceiver port to the second node transceiver port. The one of the plurality of priority
levels of packets accumulates in one of a plurality of a transmit buffers (362) of the first
transceiver port, where the one of the plurality of transmit buffers corresponds to the one
15   of the plurality of priority levels of packets. Per-flow flow control (372) operates to
modify transmission of the one of the plurality of priority levels of packets to the transmit
buffer if the transmit buffer reaches a transmit threshold value (360). Link level flow
control operates transparently to a traffic manager (352) of the first node if the congestion
condition occurs and the one of the plurality of transmit buffers fails to reach the transmit
20   threshold value.